



COMMUNICABLE DISEASE THREATS REPORT

CDTR Week 30, 20-26 July 2014

All users

This weekly bulletin provides updates on threats monitored by ECDC.

I. Executive summary **EU Threats**

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014

Latest update: 24 July 2014

West Nile fever (WNF) is a mosquito-borne disease which causes severe neurological symptoms in a small proportion of infected people. During the June to November transmission season, ECDC monitors the situation in EU Member States and neighbouring countries in order to inform blood safety authorities regarding WNF-affected areas and identify significant changes in the epidemiology of the disease.

→Update of the week

During the past week, no new human cases of West Nile fever have been reported in the EU or neighbouring countries.

Mass gathering monitoring - Commonwealth Games - Scotland 2014

Latest update: 24 July 2014 Opening date: 11 June 2014

ECDC has in collaboration with Health Protection Scotland enhanced its monitoring activities during the Commonwealth Games: an international, multi-sport event involving athletes from the Commonwealth nations. The games will take place from 23 July to 3 August 2014 in the surrounding areas of Glasgow, Edinburgh and near Carnoustie on Scotland's east coast. Around 1 million spectators and 6 500 athletes and officials are expected to attend the event.

→Update of the week

During the past week, ECDC has not detected any events of public health significance to the games.

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 24 July 2014

Measles, a highly transmissible vaccine-preventable disease, is still endemic in many EU countries in which vaccination uptake remains below the level required to interrupt the transmission cycle. ECDC monitors measles transmission and outbreaks in EU and neighbouring countries in Europe on a monthly basis through enhanced surveillance and epidemic intelligence activities. Elimination of measles requires consistent vaccination uptake above 95% with two doses of measles vaccine in all population groups, strong surveillance and effective outbreak control measures.

→Update of the week

Since the last monthly update, there has been an update on the ongoing outbreak in the Czech Republic. The outbreak in the Hague in Netherlands has been declared to be over. A small outbreak was reported in Sweden. Outside of the EU, besides the ongoing epidemic in the Philippines, there are several new large outbreaks reported in Russia, Kyrgyzstan, the USA, New Zealand, Australia and the Federated States of Micronesia.

Non EU Threats

New! Pneumonic plague - China - 2014

Opening date: 24 July 2014

On 17 of July 2014 a fatal case of pneumonic plague was reported in Yumen city (Gansu province, China). Plague is a highly infectious bacterial zoonotic disease caused by the Gram-negative bacillus *Yersinia pestis*. Following this event, Chinese authorities have imposed comprehensive control measures including a quarantine of nine days in and around some areas of Yumen city. In addition, 151 close contacts of the patient have been isolated for observation. As of 24 July, and in the absence of new cases, the quarantine of the city has been lifted.

Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 24 July 2014

An outbreak of chikungunya virus infection has been ongoing in the Caribbean since December 2013. The outbreak has spread to North, Central and South America. There have been more than 430 000 probable and confirmed cases in the region, including 26 fatalities so far. Several EU countries are reporting imported cases from the affected areas.

→Update of the week

Most of the areas previously involved continue to report increasing case numbers, and the situation is particularly severe on the island of Hispaniola (Haiti and the Dominican Republic) and in Guadeloupe.

Costa Rica, Venezuela, the Cayman Islands and the Republic of Trinidad and Tobago are now added to the list of countries with autochthonous transmission of chikungunya infection.

Jamaica and Colombia have reported imported cases since the last CDTR.

Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012 Latest update: 24 July 2014

Since April 2012, 853 cases of MERS-CoV infection have been reported by local health authorities worldwide, including 330 deaths. To date, all cases have either occurred in the Middle East, have direct links to a primary case infected in the Middle East, or have returned from this area. The source of the virus remains unknown but the pattern of transmission points towards an animal reservoir in the Middle East from which humans sporadically become infected through zoonotic transmission.

→Update of the week

Since the last CDTR, one new fatal case has been reported by Iran. Saudi Arabia has reported additional deaths in previously reported cases.

Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 24 July 2014

Global public health efforts are ongoing to eradicate polio, a crippling and potentially fatal disease, by immunising every child until transmission stops and the world is polio-free. According to the World Health Organization (WHO), polio transmission currently occurs in ten countries of the world. Polio was declared a public health emergency of international concern (PHEIC) on 5 May 2014.

→Update of the week

During the past week, five new infections with wild poliovirus 1 (WPV1) were reported.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 24 July 2014

An ongoing outbreak of Ebola virus disease (EVD) in West Africa has been affecting Guinea, Liberia and Sierra Leone since December 2013. Since April 2014, a new wave of transmission is unfolding in all three affected countries, and the outbreak continues to evolve at an alarming pace. This is the largest ever documented outbreak of EVD, unprecedented in both number of cases and deaths. It is also the largest outbreak with regard to geographical spread so far.

→Update of the week

Since the last CDTR on 17 July, the affected countries have reported 111 new cases and 47 new fatalities. The largest increase in cases since the previous update is in Sierra Leone, followed by Liberia and Guinea.

On 16 July 2014, WHO established a sub-regional outbreak coordination centre in Conakry, Guinea, to better meet the needs to control the outbreak, as a follow-up action to the Emergency Ministerial meeting that was held by WHO in Accra, Ghana, 2–3 July. The centre will consolidate and harmonise the technical support to West African countries and will assist in resource mobilisation.

II. Detailed reports

West Nile virus - Multistate (Europe) - Monitoring season 2014

Opening date: 3 June 2014 Latest update: 24 July 2014

Epidemiological summary

As of 24 July 2014, no human cases of West Nile fever have been reported in the EU. Seventeen cases have been reported from neighbouring countries since the beginning of the 2014 transmission season. Thirteen cases have been reported by Bosnia and Herzegovina in Republika Srpska in the following municipalities: Banja Luka (4), Trebinje (1), Novi Grad (1), Kljuc (1), Krupa na Uni (1), Mrkonjic Grad (1), Gornji Ribnik (1), Teslic (1), Laktasi (1) and Prijedor (1). In addition, one case, reported in Prijedor in a patient from Austria, is currently under investigation as the place of infection is still unknown. Serbia has reported three cases (one confirmed and two probable) of West Nile fever in the following regions: City of Belgrade (1), Nis (1) and South Bac (1).

Russia has reported one case of West Nile fever for the 2014 transmission season in Belgorodskaya oblast, where cases have been reported since 2012 (five cases in 2012 and two cases in 2013).

On 21 July 2014, the <u>National Reference Centre for the Study of Exotic Diseases</u> (CESME) in Italy reported that West Nile disease (WND) has been detected in a sedentary bird species in Emilia Romagna and in two pools of mosquitoes distributed in the regions of Lombardy and Emilia Romagna. In addition, WND was detected in a chicken on a poultry farm in rural Sicily.

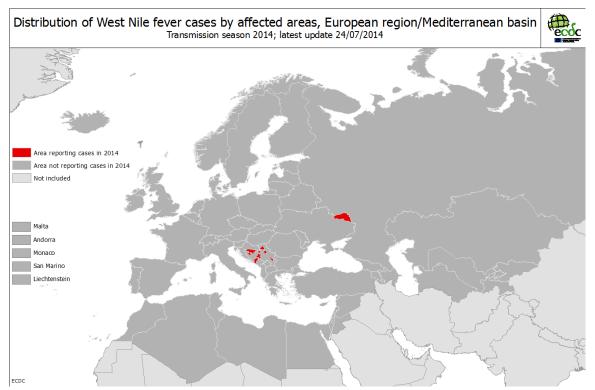
Web sources: ECDC West Nile fever | ECDC West Nile fever risk assessment tool | West Nile fever maps |

ECDC assessment

West Nile fever in humans is a notifiable disease in the EU. The implementation of control measures is considered important for ensuring blood safety by the national health authorities when human cases of West Nile fever occur. According to the <u>EU blood directive</u>, efforts should be made to defer blood donations from affected areas with ongoing virus transmission.

Actions

From week 23 onwards, ECDC produces weekly West Nile fever (WNF) risk maps during the transmission season to inform blood safety authorities regarding WNF affected areas.



Mass gathering monitoring - Commonwealth Games - Scotland 2014

Opening date: 11 June 2014 Latest update: 24 July 2014

Epidemiological summary

During the past week, ECDC has not detected any events of public health significance to the games.

Actions

ECDC is sharing information with relevant public health partners regarding this event. ECDC is carrying out enhanced epidemic intelligence activities during the games, which include adaptation of the information sources monitored, using a targeted and systematic screening approach, and tailored tools (i.e. MedISys).

Measles - Multistate (EU) - Monitoring European outbreaks

Opening date: 9 February 2011 Latest update: 24 July 2014

Epidemiological summary

EU Member States

Sweden

Media reported a measles outbreak in Kronoberg County on 9 July 2014 in the south of Sweden involving three unvaccinated members of the same family who got infected while travelling abroad. These are the first measles cases in the county in 20 years. There have been 14 cases of measles in Sweden reported so far in 2014.

The Netherlands - update

An outbreak that has been affecting The Hague region since the end of February 2014 has been declared over. There were forty cases of measles reported including both children and adults with an unknown number of hospitalised patients.

The Czech Republic

There is an ongoing outbreak of measles in the Czech Republic that started in a hospital in Usti nad Labem in February 2014. The index case was a traveller returning from India. A large number of cases (40%) in the hospital outbreak were healthcare workers, nurses, medical doctors and other hospital employees. The outbreak since then has spread to neighbouring areas. As of 21 July

2014, there have been 270 cases reported since the beginning of the outbreak.

Rest of the world:

Russia

There has been an increasing number of measles cases reported in the Tyumen Oblast during last week involving 47 people. They comprise 17 adults and 30 children. According to the Regional Centre for Surveillance of Measles in Novosibirsk, 39 are laboratory confirmed cases. Four patients are receiving treatment in an infectious diseases hospital.

Kyrgyzstan

An outbreak of measles is reported with 54 suspected cases of which 30 were laboratory confirmed.

New Zealand

Between December 2013 and 18 July 2014, there have been 260 measles cases reported in New Zealand. 113 are in Auckland, 112 in Waikato, 18 in Bay of Plenty/Lakes, 11 in Hawke's Bay, 4 in Wellington, 1 in Nelson-Marlborough and 1 in Taranaki. At least 40 of the cases were hospitalised.

Australia

The number of measles cases in Victoria has risen to 57 since the start of the year, the highest in 15 years. An alert has been issued to general practitioners and hospital emergency departments. Several children were hospitalised.

The Philippines- update

47 000 cases of measles (36 493 suspected cases and 10 676 confirmed cases) and 77 measles deaths were reported in the Philippines from 1 January 1 through 20 June 2014.

USA - update

During 1 January-11 July 2014, there have been 566 confirmed cases in the U.S. reported to CDC's National Center for Immunization and Respiratory Diseases (NCIRD). This is the highest number of cases since measles elimination was documented in the U.S. in 2000.

There are currently several ongoing outbreaks of measles in the country. The largest outbreak in the U.S.A. in 20 years is reported in Ohio where the number of measles cases has reached 374 including 10 hospitalisations. It started in an Amish community in March 2014 after Amish travellers returned from a visit to the Philippines. The last date of onset of disease was on 14 July 2014. There is a simultaneous mumps outbreak in Ohio with 153 cases including 5 cases of orchitis. In addition, there is an outbreak of measles in the Kansas City area with 30 reported linked cases and another in the State of Washington within the Micronesian community that has resulted in 12 cases.

Publication:

Evaluation of the measles, mumps and rubella vaccination catch-up campaign in England in 2013 available at: http://www.sciencedirect.com/science/article/pii/S0264410X14007774

Web sources: <u>ECDC measles and rubella monitoring</u> | <u>ECDC/Euronews documentary</u> | <u>WHO Epidemiological Briefs</u> | <u>MedISys Measles page</u> | <u>EUVAC-net ECDC</u> | <u>ECDC measles factsheet</u>

ECDC assessment

During 2014, seven EU Member States have reported measles outbreaks. The target year for measles elimination in Europe is 2015. The current situation suggests that endemic measles transmission continues in many EU Member States and the prospect of achieving the 2015 objective is diminishing.

New! Pneumonic plague - China - 2014

Opening date: 24 July 2014

Epidemiological summary

On 17 July 2014, Chinese health authorities reported a fatal case of pneumonic plague in a 38-year-old man from Yumen City in Gansu province. The patient was admitted to hospital on 15 July and died on 16 July. He was a farm worker and had a history of exposure to a dead marmot that he had fed his dog.

In response to the case, the Chinese authorities issued a level-III emergency alert for the region and implemented control measures in accordance with the Disease Prevention Act, including isolation and prophylactic treatment of the patient's 151 close

contacts. In addition, four quarantine zones in and around Yumen City were established. Based on the incubation period, the quarantined areas remained closed for nine days after the case was diagnosed. No further cases have been reported as of 23 July 2014, and the quarantine has been lifted as of 24 July.

Similar control measures were put in place when authorities sealed off a town in Qinghai province following two cases of pneumonic plague.

Web sources: ECDC Factsheet

ECDC assessment

Although this is a rare event and a severe disease, the case is not unprecedented nor was it unexpected:

- *Yersinia pestis* infections are endemic to the rodent populations in large parts of China (enzootic). Sporadic zoonotic transmissions to humans are therefore expected, and China regularly reports human plaque cases to WHO.
- Marmots are a documented source of *Yersinia pestis* infections in China. Furthermore, the infection occurred in a known plague focus in China. Although it is not reported how the victim acquired the dead marmot, it is noteworthy that a 2005 serological study found that 40% (25/63) of marmot hunters had anti-plague antibodies (2). Marmots are known to develop a pneumonic form of plague.

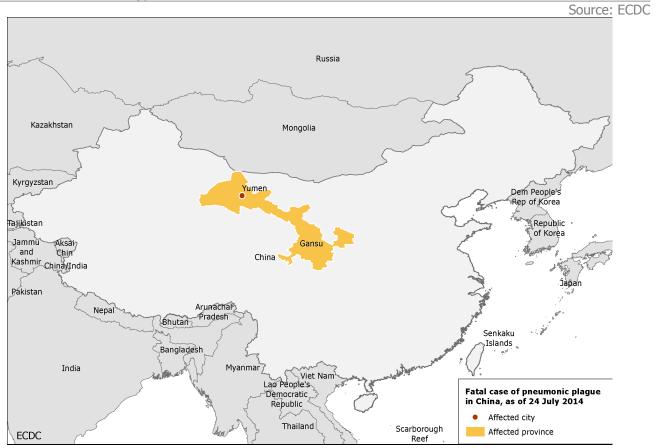
The response to the event appears appropriate, and there are no indications of continued spread:

- The close contacts of the case have received prophylactic antibiotic treatment and none of them have developed symptoms. There are no reports of human-to-human transmission associated with this case, nor are there reports of additional cases in the community.
- Media reports on previous outbreaks of human plague in China indicate that the restriction of movement put in place around the case represents a standard response to a case of pneumonic plague in China.
- A human plague case is a signal that there could be increased transmission among rodents, but so far there have been no reports about an ongoing epizootic in the area.
- There are no indications that this case of pneumonic plague is the result of intentional release.
- The location from where the case was reported is not an area that attracts foreign tourists.
- At this point, the risk of contracting plague for EU travellers to the affected area in China is considered to be unchanged and very low, unless tourists would be in direct contact with a new case of pneumonic plague, which is very unlikely. Risk of importation to the EU through an incubating traveller arriving from China is considered very low.

Actions

ECDC is preparing a rapid risk assessment on this event.

Location of Yumen city, China



Chikungunya outbreak - The Caribbean, 2013-2014

Opening date: 9 December 2013 Latest update: 24 July 2014

Epidemiological summary

As of 18 July 2014, 436 586 suspected cases of chikungunya virus infection have been reported from the affected countries and territories in the Caribbean and the rest of the Americas, including 26 fatalities. For the breakdown of figures please see the latest <a href="https://www.who.new.com/

On 17 July 2014, the US reported the first locally acquired cases of chikungunya in Florida, one in Miami Dade County and the other in Palm Beach County.

Several EU/EFTA countries have reported imported cases of chikungunya infection in patients with travel history to the affected areas: France, Greece, Italy, the Netherlands, Spain and Switzerland.

Web sources: PAHO update | ECDC Chikungunya | CDC Factsheet | Medisys page | CARPHA interactive chikungunya map

Source: ECDC SRS

ECDC assessment

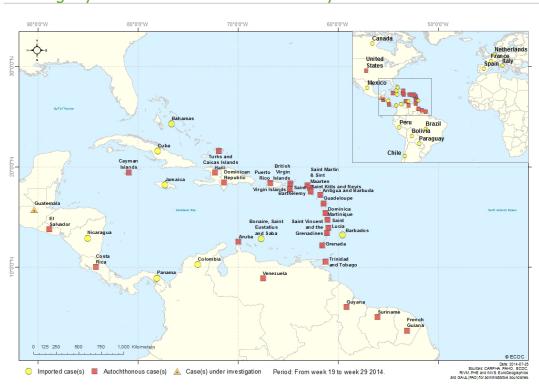
Epidemiological data indicate that the outbreak, which started in Saint Martin (FR), is still expanding and has reached Central and South America. Increasing case numbers have been observed from most of the affected areas. The vector is endemic in the region, where it also transmits dengue virus. Further spread of the outbreak is not unexpected.

Vigilance is recommended for the occurrence of imported cases of chikungunya in tourists returning to the EU from the Caribbean, including awareness among clinicians, travel clinics and blood safety authorities.

Actions

ECDC updated its Rapid Risk Assessment and published it on the website on 27 June.

Chikungunya in the Caribbean as of 24 July 2014



Middle East respiratory syndrome- coronavirus (MERS CoV) - Multistate

Opening date: 24 September 2012 Latest update: 24 July 2014

Epidemiological summary

Since April 2012, and as of 24 July 2014, 853 cases of MERS-CoV have been reported by local health authorities worldwide, including 330 deaths.

Confirmed cases and deaths by region Middle East

Saudi Arabia: 721 cases/297 deaths United Arab Emirates: 73 cases/9 deaths

Qatar: 7 cases/4 deaths Jordan: 18 cases/5 deaths Oman: 2 cases/2 deaths Kuwait: 3 cases/1 death Egypt: 1 case/0 deaths

Yemen: 1 case/1 death Lebanon: 1 case/0 deaths Iran: 5 cases/2 death

Europe

UK: 4 cases/3 deaths Germany: 2 cases/1 death France: 2 cases/1 death Italy: 1 case/0 deaths Greece: 1 case/1 death

Netherlands: 2 cases/0 deaths

Africa

Tunisia: 3 cases/1 death Algeria: 2 cases/1 death

Asia

Malaysia: 1 case/1 death Philippines: 1 case/0 deaths

Americas

United States of America: 2 cases/0 deaths

Web sources: ECDC's latest rapid risk assessment | ECDC novel coronavirus webpage | WHO | WHO MERS updates | WHO travel health update | WHO Euro MERS updates | CDC MERS | Saudi Arabia MoH

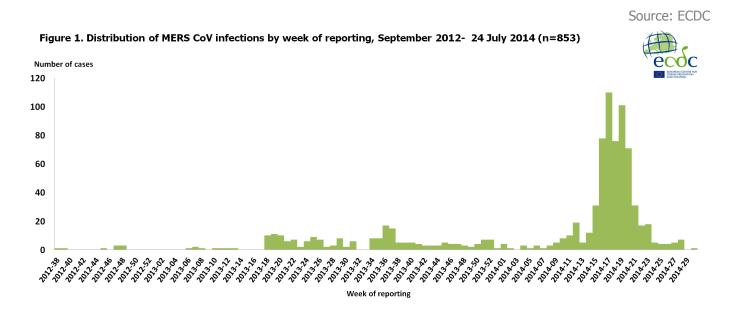
ECDC assessment

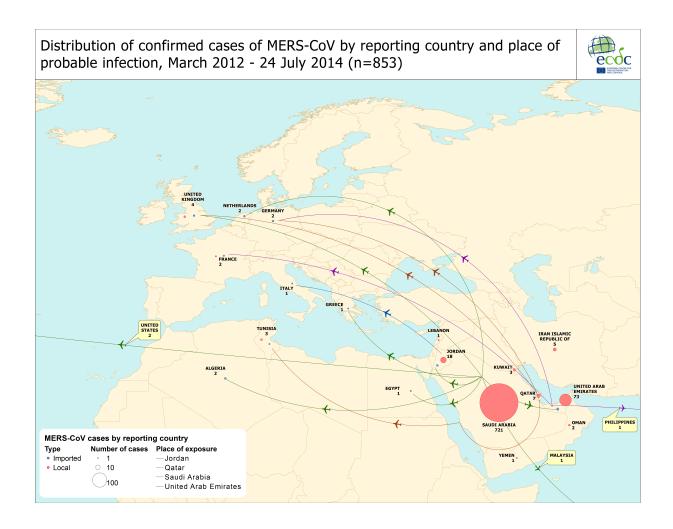
The source of MERS-CoV infection and the mode of transmission have not been identified, but the continued detection of cases in the Middle East indicates that there is a persistent source of infection in the region. Dromedary camels are a host species for the virus, and many of the primary cases in clusters have reported direct or indirect camel exposure. Almost all of the recently reported secondary cases, many of whom are asymptomatic or have only mild symptoms, have been acquired in healthcare settings. There is therefore a continued risk of cases presenting in Europe following exposure in the Middle East, and international surveillance for MERS-CoV cases is essential.

The risk of secondary transmission in the EU remains low and can be reduced further through screening for exposure among patients presenting with respiratory symptoms (and their contacts) and strict implementation of infection prevention and control measures for patients under investigation.

Actions

ECDC published an <u>epidemiological update</u> on 2 July 2014. The last <u>rapid risk assessment</u> was published on 2 June 2014. ECDC is closely monitoring the situation in collaboration with WHO and EU Member States.





Poliomyelitis - Multistate (world) - Monitoring global outbreaks

Opening date: 8 September 2005 Latest update: 24 July 2014

Epidemiological summary

During the past week, five new infections with wild poliovirus 1 (WPV1) were reported, all from Pakistan.

Worldwide, 128 cases have been reported to WHO in 2014, compared with 140 for the same time period in 2013. In 2014, nine countries have reported cases: Pakistan (99 cases), Afghanistan (8 cases), Equatorial Guinea (5 cases), Nigeria (5 cases), Somalia (4 cases), Cameroon (3 cases), Iraq (2 cases), Syria (1 case), and Ethiopia (1 case).

Equatorial Guinea has been added to the list of 'virus-exporting countries' which should now implement a set of Temporary Recommendations recently issued by the Director-General of the World Health Organization under the International Health Regulations (2005). Among other things, these recommendations call for the vaccination of all residents and long-term visitors prior to international travel. The addition of Equatorial Guinea to the list follows the detection of wild poliovirus genetically linked to the current outbreak in Cameroon in a sewage sample collected near Sao Paulo, Brazil.

Web sources: Polio Eradication: weekly update | MedISys Poliomyelitis | ECDC Poliomyelitis factsheet

ECDC assessment

Europe is polio-free. The last polio cases within the current EU borders were reported from Bulgaria in 2001. The latest outbreak in the WHO European Region was in Tajikistan in 2010, when importation of WPV1 from Pakistan resulted in 460 cases.

Genetic sequencing indicated that the five cases reported in 2014 from Equatorial Guinea are linked to the ongoing outbreak in Cameroon. A national emergency action plan to respond to the polio outbreak was developed by the Ministry of Health in Equatorial Guinea and polio partner agencies and is being implemented.

The recent importation event in Brazil from Equatorial Guinea demonstrates that all regions of the world continue to be at risk of exposure to wild poliovirus until polio eradication is completed globally.

The confirmed circulation of WPV in several countries and the documented exportation of WPV to other countries support the fact that there is a potential risk for WPV being re-introduced into the EU/EEA. The highest risk of large outbreaks of poliomyelitis are in areas where unvaccinated populations are geographically clustered or live in poor sanitary conditions, or a combination of the two.

References: ECDC latest RRA | Rapid Risk Assessment on suspected polio cases in Syria and the risk to the EU/EEA | Wild-type poliovirus 1 transmission in Israel - what is the risk to the EU/EEA? | WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus, 5 May 2014

Actions

ECDC follows reports of polio cases worldwide through epidemic intelligence in order to highlight polio eradication efforts and identify events that increase the risk of re-introduction of wild poliovirus into the EU.

Following the declaration of polio as a PHEIC, ECDC has updated its <u>risk assessment</u>. ECDC has also prepared a background document of travel recommendations for the EU.

Outbreak of Ebola Virus Disease - West Africa - 2014

Opening date: 22 March 2014 Latest update: 24 July 2014

Epidemiological summary

The distribution and classification of the cases (as of 20 July 2014) are as follows (based on best available information reported by ministries of health through the World Health Organization, Regional Office for Africa):

Guinea: 415 cases (304 confirmed, 98 probable, and 13 suspected) and 314 deaths (204 confirmed, 98 probable, and 12 suspected);

Liberia: 224 cases (77 confirmed, 68 probable, and 79 suspected) and 127 deaths (56 confirmed, 44 probable, and 27 suspected);

Sierra Leone: 454 cases (405 confirmed, 35 probable, and 14 suspected) and 219 deaths (182 confirmed, 32 probable, and 5 suspected). Sierra Leone recorded 57 new cases over the last week.

As of 20 July 2014, the cumulative number of cases attributed to EVD in the three countries stands at 1 093, including 660 deaths.

Web sources: Reliefweb map | WHO/AFRO outbreak news | WHO Ebola Factsheet | ECDC Ebola health topic page | ECDC Ebola and Marburg fact sheet | Risk assessment guidelines for diseases transmitted on aircraft | EID "Undiagnosed Acute Viral Febrile Illnesses, Sierra Leone" | NEJM 16 April article

ECDC assessment

This is the largest outbreak of EVD reported so far and also the first documented outbreak of EVD in West Africa. The origin of the outbreak is unknown. The outbreak, after an apparent slowdown, has intensified again in the last few weeks, with an upsurge of EVD cases in Sierra Leone. Community resistance, inadequate treatment facilities and insufficient human resources in certain affected areas are among the challenges currently faced by the three countries in responding to the EVD outbreak.

The risk of infection for international travellers is considered very low since most human infections result from direct contact with the bodily fluids or secretions of infected patients, particularly in hospitals (nosocomial transmission) and as a result of unsafe procedures, use of contaminated medical devices (including needles and syringes) and unprotected exposure to contaminated bodily fluids.

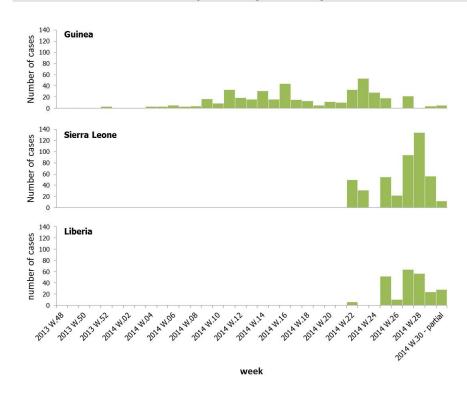
Actions

An epidemiological update was posted on 17 July 2014 on the ECDC website.

ECDC published an update of its <u>rapid risk assessment</u> on 9 June. ECDC provided guidance to Member States for <u>EU travellers</u> to and from the affected countries.

Distribution of EVD cases in Guinea, Sierra Leone, Liberia by week of reporting, December 2013 - 20 July 2014 (n=1093)





The Communicable Disease Threat Report may include unconfirmed information which may later prove to be unsubstantiated.